



## MISSION

Provide direct and general support fires to maneuver forces on the future battlefield; become the indirect fire support “system of systems” howitzer and resupply vehicle.

## DESCRIPTION AND SPECIFICATIONS

The Crusader Self-Propelled Howitzer (SPH) is a 155mm self-propelled howitzer system that will increase artillery survivability, lethality, mobility, and operational capability and effectiveness through use and integration of advanced technology. The Crusader program has been restructured to improve its deployability and relevance to the Army Vision and the Objective Force while retaining all of its key performance parameters (range, rate-of-fire, mobility, and resupply). Key features of the restructured Crusader are lower weight (less than 40 tons versus 55 tons), smaller size (2 howitzers transportable in the C-5B), and a change in resupply vehicle philosophy. The lower weight and smaller size are achieved through the extensive use of titanium and composites, reduction in onboard ammunition, employment of reconfigurable armor, elimination of one road wheel, and incorporation of a lower weight automotive powerplant. Now, Crusader howitzers will be resupplied by one tracked and one wheeled resupply vehicle for each two howitzers, versus one tracked resupply vehicle per howitzer.

SPH-critical technologies and capabilities include the XM297E2 integral mid-wall cooled cannon, modular artillery charge system (MACS), automatic inductive settable multi-option fuze (MOFA), fully automated ammunition handling and loading systems, composite armor, enhanced survivability, improved mobility, and embedded training and diagnostics.

The tracked and wheeled resupply vehicles (RSV-T and RSV-W) will enable automatic transfer of ammunition and fuel to the SPH or another RSV to meet required firing rates; enable autonomous operation; and capitalize on cost and operational advantages of component commonality. RSV critical technologies and capabilities include an automated docking boom, ammunition resupply system, fuel transfer system, improved mobility, and embedded training and diagnostics. The Crusader will displace the M109A6 Paladin Self-Propelled Howitzer and the M992A2 Field Artillery Ammunition Supply Vehicle beginning in 2QFY08.

### SPH

**Range:** 40+ km (assisted)

**Rate of fire:** 10–12 rd/min

**Multiple round, simultaneous impact:** 4–8 rd (1 SPH)

**Ammo storage:** 48–60 fuzed rd

**Weight:** 40 tons or less

**Crew:** 3

### RSV

**Automated rearm:** 60 rd in less than 12 min

**Automated refuel:** 132–190 L/min

**Range:** 405–450 km

**Speed:** 48 mph highway; 30 mph cross country

**Ammo storage:** 130–200 fuzed rds

**Crew:** 3

## FOREIGN COUNTERPART

No known foreign counterpart

## FOREIGN MILITARY SALES

None

## PROGRAM STATUS

**1QFY95** Approved to commence program definition and risk reduction (PDRR) phase.

**2QFY98** Conducted an in-process review and authorized manufacture of the PDRR prototype systems.

**3QFY99** Delivered first RSV(-) prototype.

**2QFY00** Delivered first prototype howitzer SPH 1.

## PROJECTED ACTIVITIES

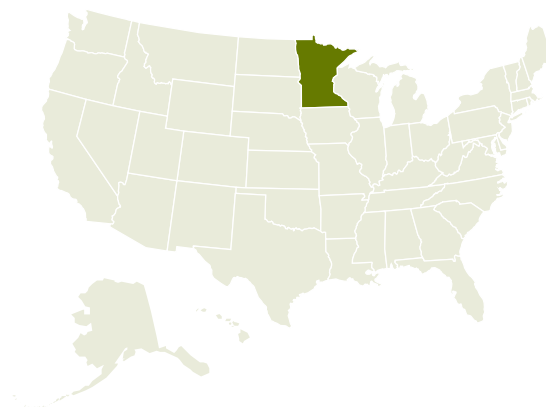
**2QFY03** Milestone II scheduled.

**2QFY08** First unit equipped.

**2QFY08** Milestone III scheduled.

## PRIME CONTRACTORS

United Defense, L.P. (Minneapolis, MN)



\* See appendix for list of subcontractors

